

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 04-068-PCTEP	<b>FOR FURTHER ACTION</b>	See item 4 below
International application No. PCT/JP2004/019700	International filing date ( <i>day/month/year</i> ) 22 December 2004 (22.12.2004)	Priority date ( <i>day/month/year</i> ) 26 December 2003 (26.12.2003)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant KAO CORPORATION		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |              |   |
|-------------------------------------|--------------|---|
| <input checked="" type="checkbox"/> | Box No. I    | Basis of the report   |
| <input type="checkbox"/>            | Box No. II   | Priority  |
| <input type="checkbox"/>            | Box No. III  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | Box No. IV   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | Box No. V    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/>            | Box No. VI   | Certain documents cited   |
| <input type="checkbox"/>            | Box No. VII  | Certain defects in the international application  |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Date of issuance of this report 26 June 2006 (26.06.2006)
Facsimile No. +41 22 338 82 70	Authorized officer <div style="text-align: center; font-weight: bold; margin-top: 10px;">Yoshiko Kuwahara</div> e-mail: pt07@wipo.int

# PATENT COOPERATION TREATY

REC'D 21 MAR 2005

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From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/JP2004/019700

International filing date (day/month/year)  
22.12.2004

Priority date (day/month/year)  
26.12.2003

International Patent Classification (IPC) or both national classification and IPC  
C11D3/12, C11D3/39, C11D3/00

Applicant  
KAO CORPORATION

### 1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/019700

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/JP2004/019700

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**Box No. V Reasoned statement under Rule 43b/s.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	3,4,8
	No: Claims	1,2,5-7
Inventive step (IS)	Yes: Claims	3,4,8
	No: Claims	1,2,5-7
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

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**Box No. VIII Certain observations on the international application**

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The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

Reference is made to the following documents:

- D1: EP-A-0 483 411 (THE PROCTER & GAMBLE COMPANY) 6 May 1992
- D2: EP-A-0 297 673 (THE PROCTER & GAMBLE COMPANY) 4 January 1989
- D3: WO 95/33038 A (THE PROCTER & GAMBLE COMPANY) 7 December 1995
- D4: US 2002/128165 A1 (BAKER A S ET AL) 12 September 2002

- V. The subject-matter of independent claims 1, 5, and 6 lack novelty in contrast to Article 33(1) and (2) PCT.

Claim 1 defines softening detergent compositions comprising (a) 1 to 30 wt% of a clay mineral, (b) 0.5 to 20 wt% of a hydrogen peroxide releasing compound, (c) 0.1 to 20 wt% of an acyloxybenzene sulphonate or carboxylate bleach activator according to formulae (1) and/or (2), and 10 to 60 wt% of a "cryptic" surfactant. Since it is not clear, which surfactants are covered by the respective definition, any type of surfactant is considered to comply with this definition. Moreover, the mass ratio (b)/(c) is from 3/4 to 20/1.

Respective compositions can be found in D1 to D4.

Applicants attention is drawn to D1, examples IV and IX; D2, example II; D3, example 3; and D4, example I. Respective softening methods are at least implicitly disclosed.

Since none of the cited prior art documents suggests that the softening performance of clay-based softening detergent compositions can be improved by the use of the claimed bleaching system, an inventive step could be acknowledged, provided that

- a) the subject-matter of the claims is novel and
- b) applicants can explain the findings of Comparative Example III-3, which comprises all features of the present claims and nevertheless leads to a poor softening performance. (Article 33 (1) to (3) PCT)

- VIII. The subject-matter of claims 1, 3, and 4 lacks clarity (Article 6 PCT).

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

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Claim 1 defines the surfactant according to JIS K 3362:1998. This is not allowable, since the claims must be clear by itself without reference to other documents. Moreover, there is no indication in the specification, which surfactants are considered as being in the scope of this Japanese standard. Even table 7 of the instant application is inconsistent within this respect, since the amount of K 3362 surfactants is higher than the amounts of surfactants being present in the table.

Regarding formulae (1) and (2) M represents apparently a cation - see ammonium as a respective member for M. However, a metal atom or an alkanolamine do not represent cationic moieties.

In claim 3, the term "wherein the anionic surfactant is contained in an amount of 55% by mass or more of the component corresponding to the surfactant, the component (d) is contained in an amount of from 4 to 40% by mass of the component corresponding to the surfactant" lacks clarity and is apparently in contradiction with itself.

Moreover, it is unclear whether component (d) is a surfactant within the meaning of the JIS standard.

Claim 4 refers back to claim 3 requiring that the alkylbenzene sulphonate is contained in an amount of from 35 to 70% by mass of the component corresponding to the surfactant other than the component (d). However, claim 3 is silent on alkylbenzene sulphonates.

The vague and imprecise statement in the description on page 42 (spirit of the invention) implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them.